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For:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

§ 8 **Group Art Unit: 1721**

Serial No.: 08/869,109

Chesser, et al. <

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Examiner: C. H. Kelly

Filed: June 4, 1997

Controlled Hydration of Starch in High Density Brine Dispersion

Atty. Docket: B154-9245C-US

RESPONSE TO FIRST OFFICE ACTION

Assistant Commissioner for Patents Washington, D.C. 20231

This paper is filed in response to the office action mailed April 30, 1999.

AMENDMENTS

1. (Three times amended) A method for [producing a precursor] hydrating a water soluble polymer [dispersion] for addition to a brine for use in drilling and completion operations comprising:

providing a precursor brine comprising an aqueous solution of a first salt at a first density, said first salt comprising cations consisting essentially of cations of one or more multivalent alkaline earth metals; and

mixing [a] said water-soluble polymer with said precursor brine at a first concentration and under first conditions, wherein said first density, said first concentration, and said first conditions are effective to produce a precursor polymer dispersion comprising particles of said water-soluble polymer at a level of prehydration;

wherein, even absent other solvating agents [upon] addition of a sufficient quantity of said precursor polymer dispersion to a final brine comprising an aqueous